# VACUUM-PROCESSING CHAMBER-SHIELD AND MULTI-CHAMBER PUMPING METHOD

**Abstract of the Disclosure:**

One or more chambers of a multi-chamber vacuum processing apparatus are provided with a high gas flow conductance path to an exhaust volume of the apparatus that is maintained at high vacuum with a high vacuum pump. Separate pumps for the one or more chambers are made unnecessary by providing such chambers with a protective deposition shield or shield set that is configured to substantially protect walls of the chamber and the gas flow conductance path from deposition and to partially impede the gas flow from the chamber through the gas flow conductance path to the exhaust volume so that the chamber can be operated at a higher pressure than that of the exhaust volume and the chambers can be operated at different pressures and without cross-contamination. Preferably, a nested set of chamber shields is used. A controller is programmed to control the processing of wafers in the chambers by controlling the supply of process gas into the chambers.